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REMARKS

Applicant respectfully requests reconsideration of the application in view of the following remarks. Pending claims 13-22 have not been amended. Therefore, ten claims are pending, claims 13-22.

Applicant has made a diligent effort to demonstrate and place the claims in condition for allowance. However, should there remain any outstanding issues that require adverse action, it is respectfully requested that the Examiner telephone the undersigned at (858) 552-1311 so that such issues may be resolved as expeditiously as possible.

Turning to the specific objections and rejections:

1. Claims 13-22 stand rejected under 35 U.S.C. § 102(b), as being anticipated by Kastan et al., U.S. Patent No. 4,545,691. Applicant respectfully submits, however, that Kastan fails to teach or suggest each element of the invention as claimed, and further teaches away from the invention as claimed. More specifically, claim 13, for example, recites in part:

at least one of said outer races is mounted in said outer bracket portion such that it is free to move in both axial directions.

(Emphasis added). Claim 13 recites that the outer race of the bearing as mounted in the assembly is free to move in both axial directions. Alternatively, the Kastan reference specifically teaches away from free movement in both axial directions. The Examiner has cited column 7, lines 27-31 of Kastan attempting to show where the Kastan reference teaches axial movement. Applicant respectfully submits, however, that the portion of the Kastan reference cited by the Examiner specifically explains that the outer race of the bearings are not free to move in both axial directions, and in fact teaches away from free movement in both axial directions, for at least the reason that bearing adapters are in contact with the outer races, and during the building of the crank bearing assembly of the Kastan reference the bearing adapters

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move causing the outer races to move in a lateral direction preventing movement of the outer race.

Column 7, lines 27-31 of the Kastan reference describe that the lock rings 50 and 76 longitudinally move during assembly where this movement “will normally be a slight longitudinal movement which will be transmitted to the ball bearings 42 and 48.” (Kastan, column 7, lines 27-29, emphasis added). Therefore, the movement is transmitted to the outer race of the bearings by the bearing housings 46, 72 contacting the outer race of the ball bearing. Because the bearing housing contacts the outer race of the ball bearing, the outer race cannot be free to move in both axial directions as recited in claim 13 because the bearing housing prevents movement at least in one of the axial directions. FIG. 3, for example, clearly shows the bearing housing 46 in contact with the outer race 44.

Further, the transmitted movement to the outer race during assembly of the crank assembly in the Kastan reference causes the outer race of bearings to also be moved, as is explicitly stated at column 7, lines 30-31, where the movement of the outer race is “no more than a few thousandths of an inch which is well within the tolerances of the bearing assemblies.” (Emphasis added). Column 7, lines 27-31 clearly demonstrate that the outer race of the bearings are in contact with the bearing housing, and also pressed by the bearing housing to be moved during assembly resulting in continued pressure from the bearing housing once assembled. As such, the outer race of the bearings cannot be free to move in both axial directions, and alternatively, the outer race of the bearings of the Kastan reference are not free to move in either direction because pressure is applied to the outer race by the bearing housing preventing movement. Therefore, the Kastan reference specifically requires the outer bearing to be abutted and pressed by the bearing housing, and thus teaches away from free movement in both axial directions.

Still further, the Kastan reference specifically states that “[t]he outer race 44 is pressed into the interior of a bearing housing 46.” (Column 5, lines 10-11). The Kastan reference clearly describes that the outer race is in contact with the bearing housing and thus the outer race is not free to move in both axial directions. Therefore, the Kastan reference does not anticipate, and instead teaches away from the assembly as recited in claim 13, and thus claim 13 is not anticipated by the Kastan reference.

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Claims 17 and 21 include similar language as claim 13 where “at least one of said outer races is mounted in said outer bracket portion such that it is free to move in both axial directions.” (Claim 17, emphasis added). Therefore, claims 17 and 21 are also not anticipated by the Kastan reference for at least the reasons provided above.

Claims 17 and 21 further recite in part that “the ends of the spindle comprise adapting portions to receive crank arms such that said crank arms abut against the outer stop elements in an axial direction.” The Kastan reference fails to suggest the spindle comprise adapting portions, or that the adapting portions “receive crank arms”, or that the “crank arms abut against the outer stop elements.” Alternatively, the Kastan reference only shows a single continuous “crank 10” that is “an integral one piece unit defining a first arm 12 and a second arm 14...” (Kastan, column 3, lines 59-61, emphasis added). Therefore, the Kastan reference does not teach “adapting portions” of the spindle that “receive crank arms” as recited in claims 17 and 21, and alternatively clearly shows a single continuous crank such that the crank arms are an integral single piece with the center section 16.

The Examiner indicates on page 3 of the office action that the Kastan reference “shows adapting portions (34, 9[2]), comprising stops, for receiving portions of the crank arms.” However, the bearing adaptors 34 and 92 do not receive the crank arms. Alternatively, the bearing adaptors 34 and 92 are passed around the arm 14 to be positioned on the center section 16. The arms are already positioned with the center portion and thus the bearing adaptors cannot receive the crank arms. Additionally, the bearing adaptors maintain positioning of the bearings, and do not cooperate with the arms 12 and 14, and do not “receive” the arms as recited in claims 17 and 21.

More specifically, the Kastan reference clearly shows and describes that the bearing adaptors 34 and 92 are positioned onto the center section 16 by passing the bearing adaptors down the second arm 14 and onto the center section 16. Therefore, the arms 12 and 14 are already part of the center section and thus the arms are not received by at the adaptive portions of the spindle as recited in claims 17 and 21. More specifically, the Kastan reference describes the assembly where “the second arm 14 can pass readily through the bearing adapter 34...” (Kastan, column 4, lines 62-63, emphasis added). The Kastan clearly describes that the bearing adaptor is incorporated onto the continuous arms and center section by passing the

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bearing assembly over the arm 14 and center section 16. Thus, the Kastan reference does not teach or suggest a spindle comprising adaptive portions to receive crank arms, and therefore claims 17 and 21 are not anticipated by the Kastan reference.

Further, because arm 14 is passed through the bearing adaptors 34 and 92 during the positioning of the bearing adaptors on the center section 16, the bearing adaptors cannot "receive crank arms" as recited in claims 17 and 21. Therefore, the Kastan reference fails to teach or suggest the assembly of claims 17 and 21, and thus claims 17 and 21 are not anticipated by the Kastan reference.

Still further, the Kastan reference fails to teach or suggest that the "crank arms abut against the outer stop elements," as recited in claims 17 and 21. Alternatively, the Kastan reference clearly describes and shows, for example in FIGS. 7 and 8, that the crank arm 14 does not contact the flange 94 of the bearing adapter 92. In stead, the Kastan reference specifically describes and shows a separate lock nut 96 that abuts against the bearing adapter 92 and not the crank arm. Specifically, the Kastan reference recites "there is a lock nut 96 which engages with the threads 20 and is to be tightened against the flange 94 [of the bearing adapter 92]." Further, FIG. 8 clearly shows a separation between the bearing adapter 92 and the second arm 14. Therefore, the Kastan reference fail to teach or suggest the crank arm abutting against the outer stop as recited in claims 17 and 21, and thus claims 17 and 21 are not anticipated by the Kastan reference.

Claim 21 additionally recites in part, for example, "said spindle includes at least one inner stop element that abuts against both of said inner races...." The Kastan reference fails to teach at least that the spindle includes an inner stop. Alternatively, the Kastan reference clearly describes and shows at least in FIG. 4 the placement of a sleeve 60 onto the center section 16. Therefore, the center section of the Kastan reference does not include an inner stop, and thus claim 21 is not anticipated by the Kastan reference.

Claim 22 is also not anticipated by the Kastan reference. More specifically, claim 22 recites in part, for example, "the ends of said spindle comprise adapting portions to receive said crank arms such that said crank arms abut against the outer stop element in an axial direction." As discussed above, the Kastan reference does not teach a spindle with adapting

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portions, or adapting portions that receive crank arms. The Examiner refers to the bearing adapters 34, 92. These bearing adapters, however, do not receive the crank arms. The arms 12 and 14 are continuous with the center section 16, and therefore the bearing adapter cannot receive the arms. Further, Kastan patent describes the assembly including the arm 14 being is passed through the bearing adapter so that the bearing adapter can be positioned onto the center section. As such, the bearing adapters cannot receive the crank arms because the crank arms 12, 14 are continuous with the center section 16 and the bearing adapters are pass over the arms to be positioned. Thus, the Kastan reference does not teach each element of claim 22 and does not anticipate claim 22.

Dependent claims 14-16 and 18-20 are also not anticipated by the Kastan reference for at least the reasons provided above for independent claims 1 and 17, respectively. Therefore, Applicants respectfully submits that claims 13-22 are in a condition for allowance.

Further, regarding claims 14 and 18 for example, claim 14 recite in part that the spindle includes a step that is "an inner stop element." The Kastan patent fails to suggest that the spindle can include a step that is a stop element. Kastan instead incorporates separate components to provide any stops. Claim 18 recites similar language as recited in claim 14. Therefore, the Kastan patent fails to teach each element as recited in claims 14 and 18, and thus claims 14 and 18 are not anticipated by the Kastan patent.

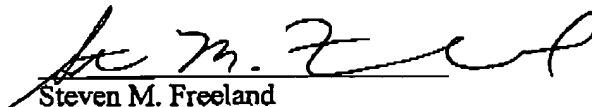
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CONCLUSION

Applicant respectfully submits that the above remarks clearly distinguish the pending claims over the cited reference, and as such, claims 13-22 are in a condition for allowance. Therefore, a Notice of Allowance is respectfully requested.

Respectfully submitted,

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